PRIVILEGED AND CONFIDENTIAL

What is claimed is:

1. A method for data transmission, comprising the steps of:

receiving a multimedia stream through an electronic medium, the stream comprising a plurality of vectors; and

based on the vectors, adding a plurality of error protection units to the multimedia stream.

2. A method for data transmission, comprising the steps of:

receiving a video stream through an electronic medium, the stream comprising a plurality of vectors;

assigning an importance to the vectors;

based on the importance, partitioning the video stream; and

based on the importance, adding a plurality of error protection units to the video stream.

3. A method for data transmission, comprising the steps of:

generating a video transmission;

converting the video transmission to a video stream, the video stream comprising a plurality of vectors;

based on the importance, partitioning the video stream; and

based on the importance, adding a plurality of error protection units to the video stream.

4. The method as recited in claim 1 further comprising the step of assigning an importance to each vector; and wherein the step of adding further comprises adding the error protection units based on the importance.

5. The method as recited in claim 1 further comprising the step of sending the multimedia stream

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with the error protection units over an electronic medium.

6. The method as recited in claim 1 wherein the multimedia stream is a video stream.

7. The method as recited in claim 1 wherein the multimedia stream is in the MPEG format.

8. The method as recited in claim 1 wherein the vectors are used to form one or more data elements from the group consisting of: a total energy (or variance) data element, a mean or variance data element, a global direction measure data element, and a plurality of small random motion data elements; and wherein the error protection units are added to the multimedia stream based on the data elements.

9. The method as recited in claim1 further comprising the steps of selecting a plurality similar vectors from the vectors based on a direction and adding the error protection units based on the similar vectors.

10. The method as recited in claim 2 further comprising the step of sending the video stream with the error protection units over an electronic medium.

11. The method as recited in claim 2 wherein the video stream is in the MPEG format.

12. The method as recited in claim 2 wherein the vectors are used to form one or more data elements from the group consisting of: a total energy (or variance) data element, a mean or variance data element, a global direction measure data element, and a plurality of small random motion data elements; and wherein error protection units are added to the video stream based on the data elements; and wherein the video stream is partitioned based on the data elements.

13. The method as recited in claim 2 further comprising the steps of selecting a plurality of similar vectors from the vectors based on a direction and adding the error protection units based on the similar vectors.

14. The method as recited in claim 3 further comprising the step of sending the video stream with the error protection units over an electronic medium.

15. The method as recited in claim 3 wherein the video stream is in the MPEG format.

16. The method as recited in claim 3 wherein the vectors are used to form one or more data elements from the group consisting of: a total energy (or variance) data element, a mean or variance data element, a global direction measure data element, and a plurality of small random motion data elements; and wherein error protection units are added to the video stream based on the data elements; and wherein the video stream is partitioned based on the data elements.

17. The method as recited in claim 3 further comprising the steps of a plurality of similar vectors from the vectors based on a direction and adding the error protection units based on the similar vectors.

18. The method as recited in claim 1 further comprising the step of adding UEP to the multimedia stream based on the vectors.

19. The method as recited in claim 2 further comprising the step of adding UEP to the video stream based on the vectors.

20. The method as recited in claim 3 further comprising the step of adding UEP to the video stream based on the vectors.

21.A system comprising:

a motion-vector extractor for extracting one or more motion vectors from a video stream;

a video stream partitioner for partitioning the video stream;

an error-protection controller for adding error protection to the video stream;

an analysis software tool for assigning an importance to each of the motion vectors, controlling the error-protection controller to add error protection based on the assigned importance, and controlling the video stream partitioner for partitioning the video stream based on the assigned importance; and

a transmitter for sending the video stream to a device.

22. A computer-readable medium, having stored thereon, computer executable process steps operative to control a computer to document source files, the steps comprising:

receiving a multimedia stream through an electronic medium, the stream comprising a plurality of vectors; and

based on the vectors, adding a plurality of error protection units to the multimedia stream.

23. A computer-readable medium, having stored thereon, computer executable process steps operative to control a computer to document source files, the steps comprising:

receiving a video stream through an electronic medium, the stream comprising a plurality of vectors;

assigning an importance to the vectors;

based on the importance, partitioning the video stream; and

based on the importance, adding a plurality of error protection units to the video stream.

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24. A computer-readable medium, having stored thereon, computer executable process steps operative to control a computer to document source files, the steps comprising:

generating a video transmission;

converting the video transmission to a video stream, the video stream comprising a plurality of vectors;

based on the importance, partitioning the video stream; and

based on the importance, adding a plurality of error protection units to the video stream.